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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,617	02/26/2004	Mitsuo Yamazaki	008312-0308496	2034

909 7590 12/08/2006

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EXAMINER

ALUNKAL, THOMAS D

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,617

Applicant(s)

YAMAZAKI, MITSUO

Examiner

Thomas D. Alunkal

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1,6,7, and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Shiyuuichi (Japanese Patent Publication 2000-293850) hereafter referring to the supplied translation of the patent document (Japanese Patent Publication 2000-293850).

Regarding claim 1 Shiyuuichi discloses an information recording apparatus comprising (see Title): 'a detection unit configured to detect a manufacturing error unique to an information storage medium (Paragraph 12, specifically information record regenerative apparatus), a transmission unit configured to transmit the manufacturing error detected by the detection unit to an external apparatus (Paragraph 23, specifically the signal processing unit and control section containing the CPU), a reception unit configured to receive a recordable capacity which is calculated by the external apparatus on the basis of the manufacturing error transmitted from the transmission unit (Paragraph 21), a limitation unit configured to limit data to be supplied on the basis of the recordable capacity received by the reception unit (Paragraph 21, specifically the

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control section and Paragraph 12), and a recording/aborting unit configured to record the recording data, supply of which is limited by the limitation unit, or to abort recording of the recording data (Paragraph 23, specifically the disc recording and control section, which has the CPU which limits the capacity).

Regarding claim 6, Shiyuuichi discloses wherein the detection unit detects a manufacturing error in a predetermined area on the storage medium (Paragraph 16) on the basis of reflected light from the information storage medium (Paragraph 12, specifically information record regenerative apparatus, which reads reflected light), and determines if data can be recorded on this area (Paragraph 10, defect sensing), the transmission unit transmits the manufacturing error in the predetermined area detected by the detection unit to the external apparatus (Paragraph 23, specifically the signal processing unit and control section containing the CPU), and the reception unit receives the recordable capacity which is calculated by the external apparatus on the basis of the manufacturing error in the predetermined area (Paragraph 21).

Regarding claims 7 and 12, claims are rejected over the same grounds as claims 1 and 6, respectively. Claims 7 and 12 only differ from claims 1 and 6 in that they claim a "determination unit". The limitations disclosed by this "determination unit" limitation are also disclosed by the "transmission unit" and "reception unit" limitations, which are previously rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **2-5,8-11** rejected under 35 U.S.C. 103(a) as being unpatentable over Shiyuuichi as applied to claim 1 above, and further in view of Ohtake et al (hereafter Ohtake) (US 4.866.688).

Regarding claim 2, Shiyuuichi discloses all limitations except for specifically detecting a tilt amount as a defect. Shiyuuichi discloses defects in the form of blemishes, contaminants, etc. All of these defects are sensed by the optical pickup. It is well known in the art that tilt is considered a defect which results in a loss of storage efficiency. This is further evidenced by Ohtake, who discloses detecting a disc tilt amount as a defect (Column 6, lines 29-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well known detection of a disc tilt amount as a defect into the defect compensation device of Shiyuuichi, motivation being to ensure efficient and reliable recording.

Regarding claim 3, Shiyuuichi discloses all limitations except for specifically detecting a error rate of prepits as a defect. Shiyuuichi discloses defects in the form of blemishes, contaminants, etc. All of these defects are sensed by the optical pickup. It

is well known in the art that the error rate of prepits is considered a defect which results in a loss of storage efficiency. This is further evidenced by Ohtake, who discloses detecting an error rate of prepits as a defect (Column 8, lines 27-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well known detection of an error rate of prepits as a defect into the defect compensation device of Shiyuuichi, motivation being to ensure efficient and reliable recording.

Regarding claim 4, Shiyuuichi discloses all limitations except for specifically detecting an eccentricity amount as a defect. Shiyuuichi discloses defects in the form of blemishes, contaminants, etc. All of these defects are sensed by error signals reproduced by the optical pickup. It is well known in the art that eccentricity is considered a defect which results in a loss of storage efficiency. This is further evidenced by Ohtake, who discloses detecting a disc tilt amount as a defect (Column 6, lines 29-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well known detection of a disc eccentricity amount as a defect into the defect compensation device of Shiyuuichi, motivation being to ensure efficient and reliable recording.

Regarding claim 5, Shiyuuichi discloses all limitations except for specifically detecting a read rate of wobble signals as a defect. Shiyuuichi discloses defects in the form of blemishes, contaminants, etc. All of these defects are sensed by error signals reproduced by the optical pickup. It is well known in the art that wobble is considered a

defect which results in a loss of storage efficiency. This is further evidenced by Ohtake, who discloses detecting a read rate of wobble signals as a defect (Column 6, lines 44-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well known detection of a read rate of wobble signal as a defect into the defect compensation device of Shiyuuichi, motivation being to ensure efficient and reliable recording.

Regarding claims 8-11, claims are rejected over the same grounds as claims 2-5, respectively, as claiming the same subject matter. See grounds of rejection for parent claims above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Alunkal whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thomas Alunkal
Patent Examiner



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER